

In re Patent Application of:
RAYNOR ET AL.
Serial No. 09/993,387
Filing Date: NOVEMBER 16, 2001

REMARKS

The Applicants would like to thank the Examiner for the thorough examination of the present application and for the courtesies extended during a telephone interview of January 12, 2006 wherein the Examiner clarified his position. The Examiner is thanked for his helpful suggestion of a change to the title that has been followed by Applicants. The Examiner is also thanked for withdrawing the misplaced IDS.

Independent Claims 11, 21 and 30 have been amended to more clearly define the invention over the prior art, again based upon the Examiner's helpful "Response to Arguments" provided in paragraph 4. of the Official Action of November 22, 2005. Dependent Claims 13, 14, 22, 23, 33 and 34 have also been amended to more clearly define the inventions recited therein.

It is believed that the amendments do not raise any new issues. The patentability of the claims is discussed in greater detail below. Favorable reconsideration is respectfully requested.

I. The Claimed Invention

Independent Claim 11, for example, is directed to a solid state imaging device including a two-dimensional array of pixels defining an image plane. The solid state imaging device also includes readout electronics comprising a store circuit laterally adjacent the image plane for reading signals therefrom. The solid state imaging device further includes a multiconductor signal bus connected between the array of pixels and the readout electronics. Moreover, Claim 11 has

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been amended to recite that the multiconductor signal bus also comprises a respective conductor to provide a dedicated readout channel for each and every pixel of said two-dimensional array of pixels defining the image plane.

Independent Claim 30 is a method counterpart of Claim 11 and has been similarly amended. Independent device Claim 21 has also been similarly amended.

II. The Claims Are Patentable

The Examiner rejected independent Claims 11, 21, and 30 as unpatentable over the Lee et al. patent. The Lee et al. patent discloses various embodiments of an imaging device including a signal bus comprising four conductors connected to four pixels via conventional row and column addressing circuitry. (Col. 3, lines 34-40). The four pixels are used for each different color pixel: two green pixels, one blue pixel, and one red pixel, and the imaging device therefore includes four output channels for the different color pixels. (Column 3, line 22). Indeed for the embodiment shown in FIG. 2a and relied upon by the Examiner in his rejection, "[t]he column-wise output signal routing connects all the pixels of the same color filter covering to a color specific output channel." (Column 3, lines 22-24):

In contrast, amended independent Claim 11, for example, recites a multiconductor bus comprising a respective conductor to provide a dedicated readout channel for each and every pixel of said two-dimensional array of pixels defining the image plane. In other words, Lee et al. teaches away from the claimed invention of respective conductors to provide the

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dedicated readout channel for each and every pixel of the two-dimensional array. Instead Lee et al. teaches sharing of the conductors among pixels of the same color, for example.

Accordingly, it is submitted that amended independent Claim 11 is patentable over the Lee et al. patent. Independent Claims 21 and 30 include similar recitations and are also believed patentable. The dependent claims, which recite yet further distinguishing features of the invention, are also patentable, and require no further discussion.

CONCLUSIONS

In view of the amendments to the claims and the arguments presented above, it is submitted that all of the claims are patentable. Accordingly, a Notice of Allowance is respectfully requested in due course. Should any minor informalities need to be addressed, the Examiner is encouraged to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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CERTIFICATE OF FACSIMILE TRANSMISSION

I HEREBY CERTIFY that the foregoing correspondence has been forwarded via facsimile number 571-273-8300 to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 this 25th day of January, 2006.


